B. Social and Economic Characteristics

Social and economic characteristics are significant factors in individual and community health. Health status is related to socioeconomic conditions such as levels of income and education; living in communities with few economic resources; exposure to unsafe neighborhood and environmental conditions; or social inequities and healthcare barriers related to one's race, ethnicity, or language ability. Positive associations between socioeconomic status and a variety of health outcomes have been documented in the literature. Moreover, many health disparities observed among different racial/ethnic groups are related to social and economic conditions that vary across and differentially impact respective population groups.[1]

Socioeconomic status, or SES, traditionally refers to income, education, and employment. However, socioeconomic factors can be perceived more broadly to include wealth, social capital, residential segregation, or language proficiency.

This section provides population data by race and ethnicity on income, education, employment, English-language proficiency, foreign-born and refugee populations, residential segregation, and access to telephones or vehicles. These are just a few of the social and economic indicators that can help describe the context of health in different populations.

Appendix II provides definitions for the Census terms used in this section.

Poverty and Income

Poverty and income are strongly associated with health status. Racial and ethnic minorities are disproportionately represented among the poor and have less accumulated assets and wealth than whites. Persons with high incomes have better overall health outcomes than persons with low incomes.

Poverty status is determined using a set of money income thresholds that vary by family size and composition. The 2000 Census used the 1999 income thresholds to determine poverty status of families counted in 2000. In 1999, the average poverty threshold was $17,000 or below for a family of four. U.S. poverty thresholds and guidelines are updated annually by the federal government to allow for changes in the cost of living.[2]

- According to the 2000 Census, 32% of African Americans in Wisconsin and 22% of American Indians and Hispanics/Latinos lived in poverty compared to approximately 6% whites in poverty (all ages).

- Child poverty rates were higher in all racial and ethnic minority children compared to white children. About 42% of African American children lived in households where income was at or below the federally designated poverty thresholds compared to 27% of American Indian children, 23% of Asian children, 25% of Hispanic/Latino children, and 7% of white children.

- Female-headed families had higher rates of poverty than other types of families regardless of race or ethnicity.

- Wisconsin median household income was lowest for African American and American Indian households.

Table 10: Poverty status by age and race/ethnicity, Wisconsin, 1999

	African American/Black	American Indian	Asian	Hispanic/ Latino	White	All Wisconsin
All ages	31.8%	21.7%	19.8%	21.7%	6.3%	8.7%
Ages <17 years	41.7%	27.0%	23.0%	24.6%	6.5%	11.2%
Ages 18–64 years	26.2%	18.7%	18.0%	20.2%	6.1%	7.9%
Ages 65 years and older	19.3%	18.2%	14.9%	13.5%	7.0%	7.4%

Source: U.S. Census Bureau, Census 2000, Summary Tape File 3.
Note: Race categories, except white, include Hispanics.

Table 11: Poverty status by family type and race/ethnicity, Wisconsin, 1999

	African American/Black	American Indian	Asian	Hispanic/ Latino	White	All Wisconsin
All families*	28.4%	19.8%	15.8%	18.6%	3.7%	5.6%
Married couple family	8.0%	7.8%	12.0%	12.5%	2.1%	2.6%
Other Families Male householder, no wife present	26.6%	25.1%	23.2%	17.7%	7.3%	9.8%
Female householder, no husband present	42.8%	34.7%	42.1%	38.3%	14.9%	21.7%

Source: U.S. Census Bureau, Census 2000, Summary Tape File 3.
Notes: Race categories, except white, include Hispanics.
         *A "family" includes a householder and one or more other people living in the same household who are related to the householder by birth, marriage, or adoption.

Table 12: Household income by race/ethnicity, Wisconsin, 1999

	African American/Black	American Indian	Asian	Hispanic/ Latino	White	All Wisconsin
$ 10,000 and below	21.2%	14.2%	14.2%	12.3%	6.1%	7.1%
$ 10,000 to $ 24,999	27.7%	23.7%	17.7%	21.6%	17.9%	18.5%
$ 25,000 to $ 49,999	28.8%	32.9%	29.3%	35.5%	31.4%	31.3%
$ 50,000 and above	22.3%	29.2%	38.8%	30.6%	44.6%	43.0%
Median Household Income	$25,589	$32,389	$39,847	$34,978	$45,326	$43,791
Per Capita Income*	$12,186	$13,539	$14,962	$11,499	$22,548	$21,271

Source: U.S. Census Bureau, Census 2000, Summary Tape File 3.
Notes: Race categories, except white, include Hispanics.
         *Per capita income is the average income per person in a population group.

Education

Education often determines work and economic circumstances that can, in turn, impact health status. Persons with higher levels of education are more likely to adopt positive health messages and engage in activities that promote health such as better nutrition or preventive healthcare practices.[1] Education also creates opportunities for better employment and economic circumstances.

• Based on Census 2000, the Hispanic/Latino population had the highest proportion of persons with a less than ninth-grade education compared to other racial/ethnic groups.

• Among persons aged 25 and older, only 55% of Hispanics/Latinos had completed high school compared to 69% of African Americans, 77% of American Indians, 73% of Asians, and 87% of non-Hispanic whites.

Table 13: Educational attainment by race/ethnicity, population 25 years and over, Wisconsin

	African American/Black	American Indian	Asian	Hispanic/ Latino	White	All Wisconsin
% with less than a 9th grade education	6.1%	5.6%	19.4%	25.2%	4.6 %	5.4%
% high school graduate or higher	68.5%	77.3%	73.2%	54.6%	86.9%	85.1%
% with bachelor's degree or higher	10.5%	10.4%	43.0%	11.4%	23.1%	22.4%

Source: U.S. Census Bureau, Census 2000, Summary Tape File 3.
Note: Race categories, except white, include Hispanics.

Employment

Employment status and the type of occupation in which one is employed can influence health. Persons with lower wage or "blue-collar" jobs may have less job security or may be exposed to more safety hazards and occupational health risks. Employment can also provide access to employer-sponsored healthcare coverage that is positively associated with increased access to healthcare.

- Based on Census 2000, unemployment rates in Wisconsin were highest for African Americans (9.2%) and American Indians (8.4%) compared to the state's overall unemployment rate of 3.2%.

Table 14: Employment status by race/ethnicity, population 16 years and over, Wisconsin

	African American/Black	American Indian	Asian	Hispanic/ Latino	White	All Wisconsin
In the labor force						
Armed Forces	0.1%	0.0%	0.1%	0.1%	0.1%	0.1%
Civilian employed	49.6%	58.9%	60.0%	60.0%	67.0%	65.8%
Civilian unemployed	9.2%	8.4%	3.9%	6.6%	2.7%	3.2%
Not in labor force	41.1%	32.8%	36.1%	33.4%	30.2%	30.9%

Source: U.S. Census Bureau, Census 2000, Summary Tape File 3.
Note: Race categories, except white, include Hispanics.

Language

Linguistic isolation of persons in the U.S. who speak little or no English can create challenges to full participation in American society. Persons with limited English proficiency (LEP) often have barriers accessing healthcare due to limited communication with healthcare providers who do not speak the client's language. LEP individuals may also encounter difficulties understanding how to access and navigate the healthcare system.

Title VI of the Civil Rights Act of 1964 prohibits national origin discrimination and obligates healthcare and other organizations that receive federal financial assistance to ensure that persons with limited English proficiency have meaningful access to health services.[3] The key to providing meaningful access to health services is to ensure effective communication between the healthcare providers and the person with limited English proficiency. The federal guide to Culturally and Linguistically Appropriate Services (CLAS) provides suggestions on how to ensure meaningful language access.[4]

• Asians and Hispanics/Latinos in Wisconsin were most likely to speak a language other than English at home.

• Of those who spoke a language other than English at home, Hispanics/Latinos were most likely to describe their ability to speak English as "not well" or "not at all."

Table 15: Language other than English spoken at home by race/ethnicity, Wisconsin, 2000

	African American/Black	American Indian	Asian	Hispanic/ Latino	White	All Wisconsin
Percent	4.0%	12.5%	82.6%	67%	3.9%	7.3%
Number	10,690	5,641	61,954	111,867	173,056	368,712

Source: U. S. Census Bureau, Census 2000, Summary Tape File 3.
Note: Race categories, except white, include Hispanics.

Table 16: Rates in ability to speak English in persons who speak languages other than English at home by race/ethnicity, population 5 years and over, Wisconsin, 2000

	African American/Black	American Indian	Asian	Hispanic/ Latino	White	All Wisconsin
	% No.	% No.	% No.	% No.	% No.	% No.
Speak English very well	68.9% 7,369	74.9% 4,224	48.6% 30,115	47.5% 53,146	70.3% 121,614	59.6% 219,802
Speak English well	19.7% 2,104	15.2% 855	31.3% 19,407	21.4% 23,962	17.3% 29,977	21.1% 77,740
Speak English not well	10.6% 1,132	8.8% 494	16.1% 9,991	20.4% 22,777	11.6% 20,032	14.9% 55,101
Speak English not at all	0.8% 85	1.2% 68	3.9% 2,441	10.7% 11,982	0.8% 1,433	4.4% 16,069

Source: U.S. Census Bureau, Census 2000, Summary Tape File 3.
Note: Race categories, except white, include Hispanics.

Foreign-Born Population

- The populations with the largest percentages of persons not born in the United States were Asians (67%) and Hispanics/Latinos (33%).

Table 17: Foreign-born population and citizenship status by race/ethnicity, Wisconsin, 2000

	African American/Black	American Indian	Asian	Hispanic/ Latino	White	All Wisconsin
	% No.	% No.	% No.	% No.	% No.	% No.
Total foreign born	1.5% 4,537	1.5% 763	66.9% 55,567	33.1% 63,262	1.4% 65,261	3.6% 193,751
Naturalized	0.5% 1,518	0.5% 270	24.6% 20,437	7.2% 13,689	0.8% 38,507	1.4% 76,223
Not a citizen	1.0% 3,019	1.0% 493	42.3% 35,130	25.9% 49,573	0.6% 26,754	2.2% 117,528

Source: U.S. Census Bureau, Census 2000, Summary Tape File 3.
Note: Race categories, except white, include Hispanics.

Refugees

- From 1996–2000, a total of 2,772 refugees were admitted to Wisconsin from Asia, Africa, the former Yugoslavia, the former Soviet Union, and the Caribbean.

- The majority of refugees arrived from the following specific countries: Bosnia (876), Laos (622), Kosovo (325), Ukraine (232), Somalia (154), and Russia (114).

- Most refugees resettled in Milwaukee, Calumet, Brown, Sheboygan, Winnebago, and Marathon counties.

Table 18: Number of refugee arrivals in Wisconsin, 1996–2000

Region	By region	By country (No.)	% of all refugee arrivals, 1996–2000
Asia	737	Laos (622) Vietnam (66) Burma (49)	26.6%
Africa	302	Somalia (154) Nigeria (59) Sudan (36) Other African (53)	10.9%
Former Yugoslavia	1,201	Bosnia (876) Kosovo (325)	43.3%
Former Soviet Union	528	Russia (114) Ukraine (232) Other former Soviet Union (182)	19.0%
Caribbean	4	Cuba (4)	0.1%
Total	2,772	2,772	100.0%

Source: Wisconsin Department of Workforce Development, Bureau of Migrant, Refugee, and Labor Services.

Residential Segregation

Racial/ethnic minority groups, especially African Americans, are significantly more likely than whites to live in highly segregated and social and economically disadvantaged neighborhoods. Residential segregation determines conditions such as concentration of poverty, poor housing and environmental conditions, educational and employment opportunities, and access to the quantity and quality of health services.[5] Therefore, residential segregation can adversely affect health.[6,7]

High levels of segregation among African Americans are linked to a variety of social, psychological, and health outcomes. For example, long-term exposure to poverty, environmental hazards, and crime can produce chronic biological stress responses leading to higher risks of infant and adult mortality[8] and health conditions such as cardiovascular disease, diabetes, obesity, a lowered immune response, and cognitive impairment.[9]

Residential segregation is a multidimensional concept that refers to the composition and the spatial distribution of the population of an entire metropolitan area across its neighborhoods or census tracts.[10] A frequently used measure of segregation is the dissimilarity index. The dissimilarity index indicates the percentage of a group's population that would have to change residence for each neighborhood to have the same percentage of that group in the metropolitan area overall. The index ranges from 0.0 (complete integration) to 1.0 (complete segregation).[11]

Table 19 shows residential segregation of racial/ethnic minority groups in the Milwaukee-Waukesha metropolitan statistical area for 1990 and 2000 using the dissimilarity index. The closer the dissimilarity values are to 1.0, the higher the level of segregation in the minority population relative to the white reference population.

- At least moderate levels of residential segregation existed in the Milwaukee-Waukesha metropolitan area for all racial/ethnic minority groups in the area.

- In 1990 and 2000, African Americans in Milwaukee experienced the highest levels of residential segregation compared to other groups. Their dissimilarity index values, in excess of 0.8, are generally characterized as moderate to severe segregation.

- Nationally, the Milwaukee-Waukesha metropolitan area ranked second in residential segregation of African Americans and eighth for Hispanics among the largest metropolitan areas for African Americans and Hispanics in the United States in 2000.[12]

Table 19: Dissimilarity index[1], Milwaukee-Waukesha Metropolitan Area[2], Wisconsin, 1990 and 2000

	African American/ Black	American Indian	Asian[3]	Hispanic
1990	0.826	0.466	0.4233	0.564
2000	0.818	0.431	0.415	0.595

Source: U.S. Census Bureau, Housing and Household Economics Statistics Division. Housing patterns, MSA/PMSA tables.

Notes: [1] The dissimilarity index corresponds to a dissimilarity value (D) of 0 to 1. Dissimilarity values of 0.6 or more indicate very high levels of segregation; values of 0.4 or 0.5 are usually considered a moderate level of segregation; and values of 0.3 or below are considered to be fairly low.

[2] Based on metropolitan statistical areas as defined on June 30, 1999. The unit of analysis is the census tract.

[3] The 1990 Asian population includes Pacific Islanders.

Telephone and Vehicle Access

Having telephone service in the home can increase communication with healthcare providers such as receiving verbal reminders for appointments or test results. Also, many local, state, and national health surveys require that persons have telephones to take part in telephone household surveys. The underrepresentation of racial/ethnic minority groups from random surveys limits the availability of health information on racial/ethnic minority groups and subpopulations within those groups.

Moreover, lack of transportation can be a significant barrier to accessing healthcare. Although public transportation is often available in major metropolitan areas, it may not be convenient for families with challenges such as transporting small children or having to navigate multiple health, social services, or employment agencies. Geographic differences make the unavailability of private or public transportation a significant barrier in rural areas.

- African American, American Indian, and Hispanic/Latino housing units were more likely to be without telephone service than Asian or white households.

- Minority households are more likely than white households to not have a car or other motor vehicle kept at home. According to the 2000 Census, the proportions of Wisconsin homes without a vehicle were: African American, 30%; American Indian, 13%; Asian, 13%, Hispanic, 4%; and white, 7%.

Table 20: Telephone service in housing units by race/ethnicity, Wisconsin, 2000

	African American/ Black	American Indian	Asian	Hispanic/ Latino	White	All Wisconsin
	% No.	% No.	% No.	% No.	% No.	% No.
With telephone service available	91.9% 89,985	92.7% 14,747	98.2% 20,802	93.7% 45,283	98.9% 1,867,651	98.4% 2,050,336
No telephone service available	8.1% 7,948	7.3% 1,162	1.8% 382	6.3% 3,043	1.1% 21,149	1.6% 34,208

Source: U.S. Census Bureau, Census 2000, Summary Tape File 3.
Note: Race categories, except white, include Hispanics.

Table 21: Vehicles available in housing units by race/ethnicity, Wisconsin, 2000

	African American/ Black	American Indian	Asian	Hispanic/ Latino	White	All Wisconsin
	% No.	% No.	% No.	% No.	% No.	% No.
1 or more vehicles available	70.4% 68,988	87.5% 13,915	87.4% 18,515	85.7% 41,432	93.5% 1,766,883	92.1% 1,920,575
No vehicle available	29.6% 28,945	12.5% 1,994	12.6% 2,669	14.3% 6,894	6.5% 121,917	7.9% 163,969

Source: U.S. Census Bureau, Census 2000, Summary Tape File 3.
Note: Race categories, except white, include Hispanics.

Notes

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2. Census 2000 poverty thresholds were $8,959 annual income for a single individual under age 65; $8,259 for a single individual 65 years and older; and $17,463 for a family of four with two related children under 18 years old. Poverty thresholds are updated annually.

3. Department of Health and Human Services. Office for Civil Rights. Title VI of the Civil Rights Act of 1964. Policy guidance on the prohibition against national origin discrimination as it affects persons with limited English proficiency. *Federal Register.* 2002;67:4968–82.

4. US Department of Health and Human Services. Office of Minority Health. *National Standards for Culturally and Linguistically Appropriate Services in Healthcare. Final Report.* Washington, DC: US Government Printing Office; 2001. Available at: http://www.omhrc.gov/omh/programs/2pgprograms/finalreport.pdf.

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10. Massey D, White M, Phua V. The dimension of segregation revisited. *Social Methods Research.* 1996;25:172–206. The five dimensions of residential segregation include measures of evenness, isolation, clustering, centralization, and concentration.

11. Iceland J, Weinberg DH, Steinmetz E. *Racial and Ethnic Residential Segregation in the United States: 1980–2000.* Washington, DC: US Government Printing Office; 2002:119.

12. Iceland J, Weinberg DH, Steinmetz E. *Racial and Ethnic Residential Segregation in the United States: 1980–2000.* Washington, DC: US Government Printing Office; 2002. The rank was determined by the value of the dissimilarity index calculated by the US Census Bureau for blacks and Hispanics in each MSA. The lists included the top 43 and the top 36 metropolitan statistical areas (MSAs) for blacks and Hispanics, respectively, with at least 3 percent or 20,000 blacks or Hispanics and a total MSA population of at least 1,000,000.